

On the Genera of Anobiidae and Ptinidae Found in Hawaii (Coleoptera)

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The family Ptinidae is represented in Hawaii by only three widespread, introduced species included in three genera. The islands have, however, a well-developed and comparatively large anobiid fauna. There have been 141 species and 19 varieties recorded, but new species are in local collections. This number of species is more than half as large as the total number (about 250) listed from America north of Mexico. Characteristically, however, as is true of many other Hawaiian groups, the endemic species belong to only a few large genera. Only three genera, two of them endemic, contain endemic Hawaiian Anobiidae. These three genera have an average of 52 species per genus. The genus containing the largest number of species in Hawaii has 70; the largest in North America has 65.

The following tabulation will show at a glance the developments of the Ptinidae and Anobiidae in Hawaii:

PTINIDAE

Gibbium: one introduced species.

Mezium: one introduced species.

Ptinus: one introduced species.

ANOBIIDAE

Catorama: one introduced species.

Stegobium: one introduced species.

Holcobius (endemic): 14 species and 2 varieties endemic.

Xyletobius (endemic): 53 species and 16 varieties endemic.

Lasioderma: one introduced species.

Mirosternus: 70 species and 1 variety endemic.

The families may be separated as follows:

Antennae inserted below eyes on front of head and very close together; sides of prothorax not margined **Ptinidae**

Antennae inserted toward sides of head below eyes and widely separated; prothorax with a conspicuous lateral margin **Anobiidae**

PTINIDAE

Key to the Genera found in Hawaii

1. Elytra conspicuously hirsute and serially punctate; scutellum conspicuous **Ptinus**
- Elytra smooth, shiny, bare, inflated; scutellum not visible 2
2. Pronotum smooth and bare; four ventrites visible **Gibbium**
- Pronotum conspicuously uneven, very densely squamose and hirsute, vestiture concealing derm; five ventrites visible **Mezium**

Genus **Ptinus** Linné**Ptinus brunneus** Duftsmid.

A widespread species; not often collected in Hawaii.

Genus **Gibbium** Scopoli**Gibbium psylloides** (Czempinski).

A cosmopolitan species that has been taken in large numbers in fertilizer in Hawaii.

Genus **Mezium** Curtis**Mezium americanum** Laporte.

A widespread species evidently introduced into America from Europe. It is occasionally found among stored seeds and has been taken from sparrow nests in Hawaii.

ANOBIIDAE

Key to the Genera found in Hawaii

1. Only four ventrites entire and distinctly visible, first modified and largely concealed by legs; antennae 10-segmented **Catorama**
Five ventrites distinctly visible, first not very different from second ... 2
- 2(1). Middle legs received in conspicuous grooves behind fore margin of metasternum; fore and mid coxae widely separated; first antennal segment enlarged and more or less angulate, almost as long as 3-8 which are very small, 8-11 enlarged and forming a loose club **Mirosternus**
Middle legs free; metasternum without a deep groove on each side behind front margin 3
- 3(2). Fore coxae separated by a distinct process of prosternum .. **Stegobium**
Fore coxae contiguous 4
- 4(3). Elytra not striate; metasternum abruptly declivitous in front, hind margin of declivity with a fine carina throughout its breadth **Lasioderma**
Elytra striate; metasternum entire, horizontal throughout and never declivitous in front 5
- 5(4). Terminal palpal segment truncate or convex distally, never emarginate; first ventrite truncate behind and not produced over second at middle; most species less than 4 mm. long **Xyletobius**
Terminal palpal segment conspicuously emarginate at apex; hind margin of first ventrite convex, slightly produced over second in middle; most species over 4 mm. long **Holcobius**

Dorcotomini

Genus **Catorama** Guérin-Meneville**Catorama herbarium** Gorham.

Catorama herbarium Gorham: Biol. Centr. Amer. 3(2): 207, 1883.

Catorama herbarium Chevrolat (in litt.?).

Catorama mexicana Chevrolat of various authors.

Catorama pusilla Sharp (not Le Conte): Trans. Royal Dublin Soc., 3(2): 160, 1885.

Catorama sharpi Pic: Bull. Ent. Soc. France, p. 265, 1912. **New Synonym.**

I do not know how the name *C. mexicana* Chevrolat came into use, but I understand that no such species was described. That name has been used in Hawaii, however, for many years. Sharp's name *C. pusilla* was preoccupied by Le Conte's *C. (Hemystychus) pusilla* and Pic substituted the name *C. sharpi* for it. However, I have examined a series of specimens determined by Mr. Swezey as *C. pusilla* Sharp and have come to the conclusion that they are identical with *C. herbarium*. The specimens are small and agree with Sharp's description, but they cannot, I now believe, be separated structurally from typical specimens of *C. herbarium*. I believe a large series of specimens will show an intergradation in size and that Sharp's type was probably a nutritional dwarf. It is quite a common occurrence for beetles with similar feeding habits to vary greatly in size according to the quantity and quality of available food.

This is our common and destructive "Mexican book beetle." It feeds on a variety of material besides book bindings and paper, such as seeds, dead limbs and twigs, chocolate, and cayenne pepper. I have reared it in large numbers from the pods of *Acacia farnesiana*.

Genus *Mirosternus* Sharp

This genus was described from Hawaii, but a few Central American forms have been assigned to it. A tentative key to groups of our species will be found in Perkins' account in *Fauna Hawaiiensis*, 3: 615, 1910.

Anobiini

Genus *Stegobium* Motschulsky

Stegobium paniceum (Linné).

This pest, the cosmopolitan "drug store beetle," is often taken commonly in spices, cereals, dried animal products, seeds, and other plant material. It has long been in our literature as *Sitodrepa panicea* (Linné).

Xyletini

Genus *Lasioderma* Stephens

Lasioderma serricorne (Fabricius).

This is another cosmopolitan pest and is known as the "cigarette beetle." It has habits similar to those of *Sitodrepa panicea* and does much damage to cured and prepared tobacco.

Genus *Xyletobius* Sharp

The species of this endemic genus have been roughly tabulated by Perkins in *Fauna Hawaiiensis* 3: 585, 1910.

Genus *Holcobius* Sharp

The species of this endemic genus have been keyed by Perkins in these Proceedings 9: 86, 1935.

There have been three other species of Anobiidae found in Honolulu, but because they were bred from introduced material and are evidently not established in Hawaii, I have not included them in this report.